KESİT AKADEMİ DERGİSİ

Öğr. Gör. Mahmut KAYAALTI

Kütahya Dumlupınar Üniversitesi, Lisansüstü Eğitim Enstitüsü

mahmut.kayaalti@dpu.edu.tr iD ORCİD

Dr. Öğr. Üyesi Pelin KUT BELENLİ

Kütahya Dumlupınar Üniversitesi, Fen Edebiyat Fakültesi, İngiliz Dili ve Edebiyatı Bölümü

pelin.belenli@dpu.edu.tr iD ORCİD

FRANKENSTEIN'S MONSTER AS A REPRESENTATIVE OF THE THREAT OF MODERN TECHNOLOGY OPERATED BY ARTIFICIAL INTELLIGENCE

YAPAY ZEKÂ TARAFINDAN YÖNETİLEN MODERN TEKNOLOJİNİN TEHDİDİNİN TEMSİLCİSİ OLARAK FRANKENSTEIN'IN CANAVARI

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FRANKENSTEIN'S MONSTER AS A REPRESENTATIVE OF THE THREAT OF MODERN TECHNOLOGY OPERATED BY ARTIFICIAL INTELLIGENCE[1]

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Öğr. Gör. Mahmut KAYAALTI

Dr. Öğr. Üyesi Pelin KUT BELENLİ

Abstract: Mary Shelley's well-known novel *Frankenstein; or, The Modern Prometheus* (1818) has been one of the greatest works of English literature. The novel contains such a great number and variety of elements that - since its publication, while being studied by many authors - it has been studied from various perspectives from feminism to Marxism, from materialism to psychology. Accordingly, based on a transhumanist view, this paper has been prepared to query the ethics and limits of science by combining and equalling Victor Frankenstein's Monster and the technology operated with Artificial Intelligence (AI). The paper interrogates to what extent the gadgets both technological and non-technological produced for the good of humanity are useful, and whether they pose a threat to the lifecycle of the universe.

Key Words: Frankenstein, Artificial Intelligence, Transhumanism, dark science, ecology, robots

Öz: Mary Shelley'in ünlü romanı *Frankenstein; or, Modern Prometheus* (1818) İngiliz Edebiyatı'nın en görkemli eserlerinden biri olmuştur. Roman, o kadar çok ve çeşitlilikte unsurlar barındırmaktadır ki - yayımlandığı günden bu yana pek çok yazar tarafından incelenirken - feminizmden Marksizm'e, materyalizmden psikolojiye kadar çeşitli açılardan tartışılmıştır. Transhümanist bir görüşe dayanan bu makale, Victor Frankenstein'ın Canavarı ile Yapay Zekâ (AI) ile çalışan teknolojiyi eşit statüde ele alarak, bilimin etik ve sınırlarını sorgulamak için hazırlanmıştır. Makale, insanlığın yararına üretilen hem teknolojik hem de teknolojik olmayan ürünlerin ne ölçüde yararlı olduğunu ve bu ürünlerin evrenin yaşam döngüsü için bir tehdit oluşturup oluşturmadığını sorgulamaktadır.

Anahtar kelimeler: Frankenstein, Yapay Zekâ, Transhümanizm, karanlık bilim, ekoloji, robotlar

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Introduction

Although more than 200 years have passed since its publication, the impact that *Frankenstein; or, The Modern Prometheus* created in the field of literature along with the other areas is notable even today (Canavero et al., 2016: 624). Many claimed various associations regarding the emergence of the novel including Mary Shelley's dark world, a natural phenomenon – "Mount Tambora[2]" event (Marshall et al., 2019: 223), and the medical advancements in the 19th century (Blum, 2013). Whatever the reasons may be, it does not change the fact that the novel helps to understand the scientific and technological cases even in today's world. The Monster created by the mad scientist Victor Frankenstein has such extraordinary features that they can be re-evaluated from the perspective of transhumanism, which is one of the trend conceptions of our day, and future inferences can be obtained in this field.

The reason for a transhumanist reading of Frankenstein in the paper comes from the academic respect of transhumanism that it has recently gained. This is largely attributable to the technologically sophisticated world under which, in the context of AI, the posthuman phenomenon now occurs (Lilley, 2012). Basically, as a term representing the state between human and non-human, transhumanism focuses on the concept of "superhuman" created to eliminate the deficiencies in individual's biological form in order to carry the mankind to highly advanced settings (Doede, 2009). Accordingly, the Monster in the novel as an artificial being is known to be constructed for a good purpose that is "to banish disease from the human frame and render man invulnerable to any but a violent death" (Shelley, 1818/1993: 33), which makes *Frankenstein* convenient to be reviewed in a transhumanist background.

On the other hand, scientific developments that direct human life has been progressing without slowing down and reached unimaginable dimensions. A number of concepts that were imaginary 50 years ago have become commonplace for human beings today. However, it is claimed by many scientists that these developments will cause more harm than good for people in the future, and that humanity will come to an end one way or another due to those advancements (Barrett, 2018; Anderson & Rainie, 2018; Thimbleby, 2013: 161). This alarming situation has been reflected via Frankenstein's Monster in Shelley's *Frankenstein* as if it foresaw the present time. In this context, this study has been prepared in order to draw attention to environmental awareness resulting from the negligence of nature, and to make forecasts against the potential dangers that may risk the lives of human beings due to the high technology by counting the robots equipped with today's artificial intelligence in the same status as the Monster in Shelley's novel.

1.   An Ethical Aspect on The Monster of Frankenstein

Through *Frankenstein*, Mary Shelley put forward a different and at the same time a challenging idea in which a mad scientist gives life to a body, which was made of organs harvested from human corpses. Even without considering the consequences of his action, he successfully completes his experiment, and satisfies his greedy desire that he felt for science. By the way, as

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[2] A volcanic mountain in Indonesia that exploded and killed indirectly 100 thousand people in 1815. Mount Tambora eruption was recorded as the biggest volcanic catastrophe in the history.

a scientist, Victor obviously employs humanistic intentions in creating such a creature, which can be counted as discovering life's secrets, stopping mortality, or even creating new species. He clearly expresses his aim in the novel as follows: "One of the phenomena which had peculiarly attracted my attention was the structure of the human frame, and indeed and any animal endued with life " (Shelley: 41). For the motivation of the scientist, Carretero-Gonzales suggests "Victor trusts that science can play a decisive role in bringing about the perpetual progress of the human spices, and given that he had the advantage of receiving the education that enables him to contribute to that progress, he feels his duty, as a modern Prometheus" (2016: 55) to bring a solution into the dark world of humanity. Apparently, his passion may be justified as a transhumanist fantasy since the followers of this view trust in the belief that science and technology can surpass humanity through their enhanced form (Erdem, 2019). To some extent Victor's rationale might be accepted as "right" deeming that he would contribute to science one way or another. However, the issue is not producing a gadget, or building something simple; but it is creating a new human (term "non-human" is more appropriate)[3] from dead body parts and bringing him into life in a sort of way. So, while considering the ethics regarding *Frankenstein*, the scientist's experiment should be handled broadly.

From the beginning, Victor Frankenstein does not have any contact with his colleagues to share his utopic idea, and he acts individually, which is indeed not acceptable in terms of ethics in science (Jucan & Jucan, 2014: 461). If a group of people or a community had decided to put that idea of creation into life, the decision could have been regarded as legal and right because it would be an action of more than one person. Science always seeks for the ways of turning the hypotheses into theories, and for that it applies as much samples as possible (Heun, 2018). Therefore, three is better than two, two is better than one for science. Besides, according to the view of American Association for the Advancement of the Science such serious decisions – if they affect society - should be taken altogether (1998). That also makes the responsibility part easier. Even if the decisions end up with unexpected results, adopting it with crowd is much more desirable.

The second fault of Frankenstein comes from his apathy. After creating his monster, he rejects to care for his creation: "… the beauty of the dream vanished, and breathless horror and disgust filled my heart" (Shelley: 45). There might be several reasons behind it, such as the first shock, the incredibility of success, and facing with an unbelievable being; but the most apparent one is the appearance of his creature.

> *I saw the dull yellow eye of the creature open; it breathed hard, and a convulsive motion agitated the limbs. How can I describe my emotions at this catastrophe, or how delineate the wretch whom which infinite pains and care I had endeavoured to from? His limbs were in proportion, and I had selected his features as beautiful. Beautiful! - Great God! His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was lustrous black*

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[3] The monster's identity in the novel has a controversial debate due to its classification. While some sources refer it as non-human, the others claim as "constructed-human" which has much more positive attribution than non-human. However, the anthropocentric approach characterizes every other thing other than human as non-human; that's why that term is used in this article.

and flowing; his teeth of pearly whiteness; but these luxuriances only formed a more horrid contrast with his watery eyes that seemed almost of the same colour as the dun-white sockets in which they were set, his shrivelled complexion and straight black lips. (Shelley: 45)

Disappointed by the presence of his Monster, which was supposed to be greater than an average human, Frankenstein does not even give a name to his product, and it "remains nameless through the novel" (Erdem, 2019). Followingly, the Monster having got its first strike from its creator is rejected by the society, too. He comes across a considerable number of people swearing, hitting, and misusing him outside the laboratory. It is obvious that though Victor Frankenstein intended to create an entity that is physically attractive and useful to science, the ultimate scene shows a catastrophic invention that is ostracized not only by its inventor but also by the society (who also believed that they would benefit from him). Upon arriving at a small village, the Monster is attacked because of his non-human display: "Children shrieked, and one of the women fainted. The whole village was roused; some fled, some attacked me, until, grievously bruised by stones and many other kinds of missile weapons, I escaped to the open country and fearfully took refuge" (Shelley: 82). Readers dolorously witness how a ground-breaking science product is dispersed recklessly among the people.

After having experienced the case of the Monster and its adoption into the realm of humanity as a science output, conveniently, it is deduced that the matter in *Frankenstein* is not so different from what the world has today in terms of science and utilisation aspects. Indeed, Mary Shelley's fictional work just mirrors the grim realities of today. Present moment of humans is filled with loads of well-means commodities some of which are computers, vehicles, genetically modified foods, plastics, and others. All of them have been manufactured to serve for a favourable purpose. Howbeit, the point where people stand now is clogged by the fight against those goods. To exemplify, on a very simple ground, children are being tried to be prevented from computers to spend less time on, bicycling instead of autos is encouraged for transportation, modified foods produced to be more nutritious for diets are reported to be hazardous for health, and plastics[4] used in many areas prepare mankind's dramatic end (Bostrom et al., 2008). The instances might be augmented, but today, those are the ones that humanity has really hard battle with. The famous directors Wachowski siblings (1999) by pointing that battle between humans and the machines touch on the dependency of man's subsistence in their film "Matrix": "Humans are fighting the machines to survive". Considering the date of Wachowskis' utterance, it can be easily understood that the situation is now even more serious.

More importantly, if the issue is handled from the perspective of environmental mindfulness, the miserable situation of humanity can be better understood. The real problem behind the concerns and threats related to undesired consequences of scientific development arouses from the relationship between man and nature. If nature had been taken more seriously into consideration in the actions taken for the progressive aims, world states would not be puzzling their brains for environmental solutions right now (Alger & Dauvergne, 2018: 5). Herein, the argument in this paper may face with anti-criticism; population growth, increase in demand,

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[4] A region in Pacific Ocean is filled with huge amount of plastics. It is called "Great Pacific Garbage Patch". Source: https://www.nationalgeographic.org/encyclopedia/great-pacific-garbage-patch/

decrease in sources are claimed to push humanity to take actions which are urgent and have unpredictable ends; but the present portrait of our planet needs more than day-saving recipes. No longer it is widely known fact that recycling will not save the atmosphere, the plastic con-taminating lands and waters undoubtedly will turn humans' dead bodies into plasticky corps-es. To correlate the case with a scientific research: "Along the Mediterranean coast of Turkey, 1822 microplastic particles were extracted from stomachs and intestines of 1337 fish speci-men…" (Olgaç et al, 2017: 290). In a way, people open patches to their tragic finales by means of what they produce as benignant, which is not very different from Frankenstein's intention and his consequent behaviour to creature.

What Victor Frankenstein created in his experiment was not human indeed because the Monster did not have innate specifications that "human" has. It would be appropriate to label him as "non-human" organism. According to the Bennison's explanation, the term non-human is "the divide…a socially constructed separation, an 'othering'…" (2010: 41). In modern world, human is placed at the top of everything, and regarded as superior to any other non-human beings, which is exactly what anthropocentric approach claims (Kopnina et al., 2018: 111). In this context, Frankenstein's care, or lack of care to his monster can be evaluated from this per-spective. The monster also openly asserts his existence as the "other": "I, the miserable and abandoned, am an abortion, to be spurned at, at kicked, and trampled on" (Shelley: 169). As a result of his materialistic interests, even without questioning the birth-right of his creature, Frankenstein recklessly gives him life, and rejects him after seeing that he successfully managed his project. Kallman states regarding the egoist manner of Frankenstein that "[he] violates the monster's rights in the sense that the monster has not consented to the experimentation, nor has he agreed to existence under the cruel circumstances he is confronted with on account of his physicality" (2015). Ryder also takes notice of the issue of "playing with life": "To experiment upon an animal is to violate its rights and therefore it is wrong, regardless of any advantage to others" (2010: 239). As happened in Frankenstein's experiment, all the modern stuff making the lives easier have come into existence as a result of human-based thinking. As long as nature (as a representative of Monster in the novel) is kept as the "other" that can be exploited negligently, people will go on losing their dear life sources as Frankenstein did via the slaughters of his brother and lover by his brilliant science product, the Monster.

2.   Frankenstein's Monster As "Artificial Intelligence" (AI)

The 21st century has blossomed with its advanced technological innovations, one of the most prominent of which is probably the artificial intelligence (AI) (Liu et al., 2018: 34413). "Ar-tificial intelligence (AI) is an area of computer science that emphasizes the creation of intelligent machines that work and react like humans" (Habeeb, 2017). At one glance modern time is easily observed to be filled by the AI's outcomes; without going far away, most of the smart phones that people use in their daily lives are packed with this specification. When they are spotted to a flower for instance, the cameras rapidly detect the image and arrange the colour temperature, brightness and other settings, after all, they present the best-looking picture. By their speech recognition spec, they can even chat with people. In short, devices equipped with AI can behave and think like human beings.

Intrinsically, AI works by making predictions from historical data (OECD, 2019). That ability leads it perform better for the future operations. In a sense, a non-human machine – thanks to its retention capability – evolves itself ceaselessly with a rapid pace. Recently, adaptation of AI to great numbers of current devices has decreased the distance between man and machine. According to Yılmaz (2006: 258) "… artificial intelligence seems to prove that the distinction between the artificial and the real, and man and the machine are already getting blurred. Attributing the case to *Frankenstein*, the Monster appears to be a being that is not less than a robot which is operated with AI. The monster, at first nothing more than a new-born baby in terms of intellectual capacity, does not have human talents; he cannot speak, read, or even know how to feed himself. The film adaptation[5] directed by Kenneth Branagh depicts how the Monster gives struggle to survive in the society with his "other" identity; no matter how hard he tries to humanize himself to get the acceptance of the community, the Monster fails in each attempt. However, in spite of his alien identity, in time, he learns speaking, reading, and gains power, and kills people. When that quick learning skill of the Monster is taken into consideration, how the creature committed three murders without leaving any clue behind is no longer surprising (Erdem, 2019). Additionally, via his tricky plans the Monster misleads people in uncovering the real murderer of the homicides, which leads Justine and Victor to be supposed as killers. All those events presented in both novel and film as a result of natural learning process overtly indicate that the Monster has a high intellectual, moral and physical capacity. The Monster's superiority is also mentioned in the novel: "I was not even of the same nature as man. I was more agile than they, and could subsist upon coarser diet; I bore the extremes of heat and cold with less injury to my frame; my stature far exceeded their's. When I looked around, I saw and heard of none like me" (Shelley, p. 93). Eventually, the Monster's acquirements reach such a top level that he does not abstain from daring his creator:

'Slave, I before reasoned with you, but you have proved yourself unworthy of my condescension. Remember that I have power; you believe yourself miserable, but I can make you so wretched that the light of day will be hateful to you. You are my creator, but I am your master; - obey!' (Shelley: 128)

Probably Victor himself did not estimate that his action's consequences would come to such a terrible point where he would find his lovers having cleared out from the earth. To him, his unique science innovation would not give harm to his environment since its aim of was to be beneficent to the progress of science. However, unlike his expectation, the Monster had deviated from his aim because he was not a simple machine, but was a non-human entity acting with its own "brain". The owner of that synthetic brain was so developed in a short time that, out of sadness with his loneliness, he even asked the scientist to make a second monster, a partner for him. In spite of the promise he gave, Frankenstein destroyed the female monster after the completion thinking that "she might become ten thousand times more malignant than her mate" (Shelley: 126). Frankenstein by withdrawing the second creature must have considered

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[5] The name of the film is "Mary Shelley's Frankenstein". It was produced by Kenneth Branagh in 1994. The characters for Frankenstein and the monster were respectively: Kenneth Branagh and Robert De Niro.

the concern of the future time that is operated by non-human organisms.

By exemplifying *Frankenstein*, this paper does not defend the idea that humanity should get rid of all the machinery. However, by means of *Frankenstein* the study focuses on the momentousness of science's limits. Artificial Intelligence has already established its own principles and has been advancing with a rapid speed. Its advantages to humankind are numerous, yet, all that is for "now". Nobody is sure for hundred percent how those robots integrated with AI are going to behave in the future (Kose et al., 2018). While they already have left millions of people jobless, the transformation or replacement of manpower with robots is discussed to reach excessive dimension in the immediate future. Dramatically, a study indicates that "30 percent of 'work activities' could be automated by 2030 and up to 375 million workers worldwide could be affected by emerging technologies" (Manyika et al., 2017). The figure might be more trilling not only because they cause unemployment but also they have the potential to lead some other troubles like inequality or the emergence of robot rights. In this regard, the distribution of wealth to be gained through the robots can bring about unfair sharing in the society; and new law systems should be discussed introducing machines' rights and ethics. Here, the study can be criticized harshly as it is drawing black scenarios that human race will face in the course of time, but the direction of process in technological growth just reflects the moodiness of future. It does not seem totally meaningful to leave everything under robots' control. Who can guarantee that those machines will not get the infinite governance of the planet? While some states are getting busy with the preparation of their cyborg soldiers, the previous question's answer seems ambiguous. "The U.S. Army is trying to forecast what biomedically enhanced technologies could be available by 2050. The tech includes electronically super hearing, muscular control, and telepathic transfer of data" (Emanuel et al., 2019).

Conclusion

Mary Shelley, intentionally or unintentionally, has presented a similitude for today with her *Frankenstein* related to possible threats of our modern innovative products. A familiar scenario employing transhumanist and AI elements is also narrated in Winterson's *Frankissstein*[6]. Shelley has tried to highlight that foresight and consideration must be placed into every stage of human's actions, and warned the readers via the message that "technology will victimize humanity unless technological progress is restricted" (Yılmaz, 2006: 266).

Since there is still no other place except the world to provide the continuance of mankind, people need to be aware of the fact that the planet is unutterably precious for them and the next generations. Even tiny mistakes may cause unrecoverable environmental and civil catastrophes. This paper has not been formed so as to be against technology; on the contrary, the study intends to create awareness on technological developments. Though many world countries and big companies portray themselves as if they were dealing with the environmental issues or investing into future by their technologies, scientists deem that our globalized world has already said goodbye to real honest protectors (Hollander, 2004). Each step that those com-

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[6] The author's inspiration source has been Mary Shelley's *Frankenstein*. Winterson, J. (2019). *Frankissstein: A Novel*. Grove Press.

panies take in favour of global problems, turn back to them as earning, saving (Nordhaus & Shellenberger, 2005). How can a famous brand claim that they are the powerful defender of ecological activities, while at the same time they are going on selling their products within harmful chemical packages? How can a government proud of its developed technology while they are testing their life-threatening weapons in another poor country?

After all, the paper supposes that the Monster in *Frankenstein* was not the real monster even if he carried out undesirable acts and affairs. The main factor that leaded him to be cruel to community he is in was indeed his creator, Victor Frankenstein. His unethical approaches, and subhuman manners to his creation made his Monster "psychologically monster", which in fact was physically at first. The case of *Frankenstein* signals the possible responses of the following question. Who is the real threat to our world: the robots or their creators – we humans?

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